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December 11, 1995

Dr. Peter Culver, P.E.
U.S. Environmental Protection Agency
Region VII, Superfund Branch
726 Minnesota Avenue
Kansas City, Kansas 66101

DEC 13 1395 SUPERVIND ONISION

Mound Street M00000093682 1.2 SVERDRUP 12.11.95

Project: ARCS Region VI, VII, and VIII Contract No. 68-W9-0032

Subject: Trip Report for Screening Site Investigation Reconnaissance at the Mound Street PCB

Site in St. Louis, Missouri (CERCLIS ID No. MO0000093682)

Dear Dr. Culver:

Sverdrup Corporation (Sverdrup) has been tasked by the U.S. Environmental Protection Agency (EPA) to perform a Screening Site Inspection (SSI) of the Mound Street PCB Site located on the riverfront of St. Louis, Missouri (Figure 1). A site reconnaissance was performed by Michael McCurdy and Kevin Harris of Sverdrup on December 6, 1995. Sverdrup personnel met with Mr. Herman Gellman of McKinley Iron at the site. The property is currently owned by McKinley Iron, Inc. located at 3620 North Hall Street, St. Louis, Missouri. According to information obtained from Mr. Gellman, the MDNR PA report for the site, and the E&E/FIT SSI report for the adjacent site, the Mound Street PCB Site was part of the Laclede Coal Gas Site. A site walkover was then performed to document existing conditions at the Mound Street Site and surrounding areas.

The total area of the site is estimated at approximately 1.5 acres. The buildings on the site were demolished in 1991, and the property currently has no structures upon it. Mr. Gellman did not know if the basement walls and floor were removed during building demolition. He did state that the basement area was filled with demolition debris. He was not aware of any unusual observation made, such as stained soil, during the building demolition. He estimated the basement depth to be between 12 and 14 feet. Mr. Gellman stated the property was originally purchased from Union Electric to salvage power plant equipment.

The site is roughly rectangular in shape and is bordered on three sides by industrial property (Figure 2). Gravel roads are located along the property perimeter, with Mound Street being the northern boundary. An east-west path has been made which splits the property. No fencing or other barrier exists around the property. Bricks, rock, wood, metal, brush, and concrete debris are located on the southern portion of the property. Several small soil piles were observed along the southeastern edge of the property. Two 55-gallon drums were also observed adjacent to the debris. No visible markings were noted on the drums and no attempt was made to open them. The northern portion is overgrown with grass and weeds. Exposed soil, approximately four feet square, was observed on the northern portion of the property. The general surface runoff is toward the east and south. Toward the east is vacant property with railroad tracks, a concrete flood wall, and then the Mississippi River.



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The Metropolitan Sewer District, Brooklyn Street pump station is located approximately 575 feet north-northeast of the site. The pump station is located on the west side of the flood wall. Two wells sampled in 1991 by E&E/FIT and three manholes sampled by MSD in 1993 were identified (Figure 2). An abandoned pump house, once part of the Mound Street Power Plant, is located on the east side of the flood wall. The abandoned pump house is in poor condition. At the time of the site reconnaissance visit, the water level of the Mississippi River was at the bottom of the pump house. According to Mr. Gellman, the property occupied by the abandoned pump house was deeded to the City of St. Louis for construction of a bike path along the river.

The history of the property is described in the following paragraphs:

- The site occupies part of the land which was the location of the Laclede Gas and Light Company former manufactured gas plant (FMGP) in the late 1800s to the mid-1940s (Figure 3). Laclede Gas used a retort process for coal carbonization in the generation of gas. Approximately 930 million gallons of coal tar waste were produced at this facility. It is estimated that approximately 76 percent of the waste was sold, with the remaining 24 percent being buried on-site. This equates to approximately 224 million gallons of coal tar waste potentially buried at the site. On-site burial was typically conducted in unlined pits. In 1940, operations were split between Laclede Gas Light Company (Laclede Gas) and Laclede Power and Light Company (Laclede Electric).
- In 1945, Union Electric purchased the entire coal gas facility and operated the Mound Street Power Plant from 1945 to 1973. Union Electric did not manufacture coal gas at this site. In 1969, the Apex Oil Company purchased the former coal gas works (Laclede Gas works) from Union Electric; however, UE continued to operate the electrical facility from the former Laclede Electric facility (Figure 4). The Apex Company utilized the site as a tank farm for the storage of petroleum fuels until the mid-1980s, when it became an asphalt product terminal (Figure 4).
- In 1973, the Union Electric property was transferred to the Tenlis Company. Tenlis dismantled the power generation and transmission equipment. Transformer oil was reportedly disposed by Midwest Oil Company. The dismantled equipment was sold as scrap metal. In 1981, Tenlis transferred the property to AZCON. The operations of AZCON are unknown, however, it was reported in the PA report that AZCON could have been a metal recycling company. In 1985, Mound Street Corporation was the property owner and leased the building to an individual for an electric motor stripping operation. An oil fire occurred in the basement of the building in 1989, and the building was demolished in the spring of 1991. McKinley Iron became the owner of the property in 1993. The property does not have any buildings or other structures and is currently vacant.

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Previous investigations conducted on or near the subject property are described in the following paragraphs:

- The Missouri Department of Natural Resources (MDNR) submitted a Preliminary Assessment (PA) report on the Mound Street PCB Site on March 21, 1994. Field activities for the PA occurred on November 11, 1993. No samples were collected during the PA. The conclusions of the PA report indicate that a threat from the groundwater pathway is very unlikely, a release to the Mississippi River appears likely, an exposure through the soil pathway is low and an exposure through the air pathway is also low.
- On July 8, 1993, St. Louis Metropolitan Sewer District (MSD) personnel discovered oil seeping into the Brooklyn Street storm water pump station, located at the end of Brooklyn Street and approximately 400 feet north of the Mound Street PCB Site. A waste oil sample from the pump station wet well was collected and analyzed for PCBs by the MSD. A PCB concentration of 47 mg/L was detected. On August 9, 1993, waste oil samples from three manholes were collected and analyzed for PCBs by the MSD. The concentrations of PCBs were 25.4 mg/L in Manhole F-GA1 (#12), 11.7 mg/L in Manhole F-GA1 (#13), 36.6 mg/L in Manhole F-GA1 (#14) (Figure 2). Five 55-gallon drums of waste oil were pumped out of the storm sewer by REACT Environmental Engineers and disposed of by Tipton Environmental Services.

A 12,000 gallon underground storage tank (UST) containing petroleum products was discovered during an investigation to identify the potential source of the PCBs in the pump station. The UST was located on Terminal Railroad Association (TRRA) property, southwest of the Brooklyn Street pump station (Figure 5). The TRRA property is located on the north side of Mound Street, directly across from the Mound Street PCB Site. A sample was collected from the UST on July 14, 1993 by MSD. Sample analysis showed PCBs in the UST at 39 mg/L. The existence of the UST was unknown to TRRA prior to notification by the St. Louis Fire Marshall. The tank contents were removed by Environmental Operations, under supervision by GEHM Corporation, on August 4, 1993. Sample analysis of the tank contents showed PCBs at less than 10 mg/kg. Sixteen 55-gallon drums of waste were removed from the UST. On August 17, 1993 EnTech Engineering, under supervision by GEHM Corporation, conducted an Infrared Thermograph (IR/T) survey of the TRRA Site. No evidence of a leak plume was identified during this study. An anomaly was discovered, approximately 10 foot square, on the Mound Street PCB property. Boreholes were attempted at the location of the anomaly; however, they were abandoned after auger refusal at a depth of 5 feet due to encountering solid rock debris. The foundation or basement of the demolished Mound Street Site buildings could explain the IR/T anomaly.

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- The Ecology and Environment/Field Investigation Team (E&E/FIT) submitted a Screening Site Investigation (SSI) report on the Laclede Gas and Light FMGP Site on October 29, 1991. Field activities for the SSI occurred on March 3-9, 1991. Subsurface soil, surface soil, sediment, surface water and groundwater samples were collected at and around the Petroleum Fuels and Terminal Company property. No samples were collected from the basement of the Mound Street Power Plant Building (Mound Street PCB Site), as originally planned, since the building was being demolished at the time of the SSI field activities. Five (5) borehole screening locations, four (4) surface soil sample locations, three (3) groundwater sample location, three (3) surface water sample locations, and three (3) sediment sample locations were in the vicinity of the Mound Street PCB Site (Figure 6a and 6b). Groundwater sample analysis shows 65 ug/L acenapthalene, 25 ug/L fluorene, 46 ug/L phenanthene, 93 ug/L benzene and 1600 ug/L cyanide in Well 204. Well 203 sample analysis did not show any contamination except for 590 ug/L cyanide. Both cyanide results are "J" coded, the value is reported but not valid under approved QC procedures. Well 206 did not show any contamination. Analytical results for the soil screening samples, sediment samples and surface soil samples in the vicinity of the subject site are shown in Table 1. None of the samples collected during the SSI field activities were analyzed for PCBs.
- The E&E/FIT conducted a site reconnaissance of the Laclede Gas and Light FMGP on November 20, 1990 for the preparation of the SSI work plan. Seepage was observed emanating from the foundation and piping system of an abandoned pump house, formerly owned by the Mound Street Power Plant. The pipes were reportedly plugged with concrete, however, seepage was leaching through the concrete. The pump house is located on the eastern side of the flood wall, therefore, the seepage was going directly into the Mississippi River. No samples were collected during the site reconnaissance.
- The E&E/FIT submitted a Preliminary Assessment (PA) report of the Laclede Gas and Light FMGP on June 23, 1988. The field activities were conducted on September 17, 1987. Six (6) oil, water and oil/water mixture samples were collected from the Mound Street building basement and two (2) from adjacent manholes during the PA site reconnaissance (Figure 7). The samples were analyzed for PCBs. No PCB contamination was detected at a 1 mg/kg detection limit in any of the samples. The source of oil in the basement of the Mound Street Power Plant building (Mound Street PCB Site) was potentially identified as the adjacent Apex Oil terminal. It was stated in the report that Apex has had numerous spills, some of which entered the Mound Street building basement. Transformers and hydraulic oil tanks, located in the Mound Street building basement, were supposedly drained and removed in the 1970s; however, no records confirming this were available.
- The St. Louis City Division of Health conducted an assessment of the Mound Street Power

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Plant on April 8, 1987. Six oil samples were collected from the basement of the Mound Street building and analyzed for PCBs. No PCB contamination was identified.

• The U.S. Coast Guard has investigated oil slicks in the Mississippi River in the vicinity of the Mound Street PCB Site three times from 1976 to 1987. The oil slicks were reportedly originating from the Mound Street Power Plant. The basement of the Mound Street Power Plant was the suspected source of oil. No samples were collected during any of the Coast Guard investigations.

A completed response checklist is included for your review. The photographic documentation to supplement the site visit will be included with the draft SSI report. If you have any questions, please feel free to contact me at (913) 663-2108.

Sincerely,

SVERDRUP CORPORATION, Inc.

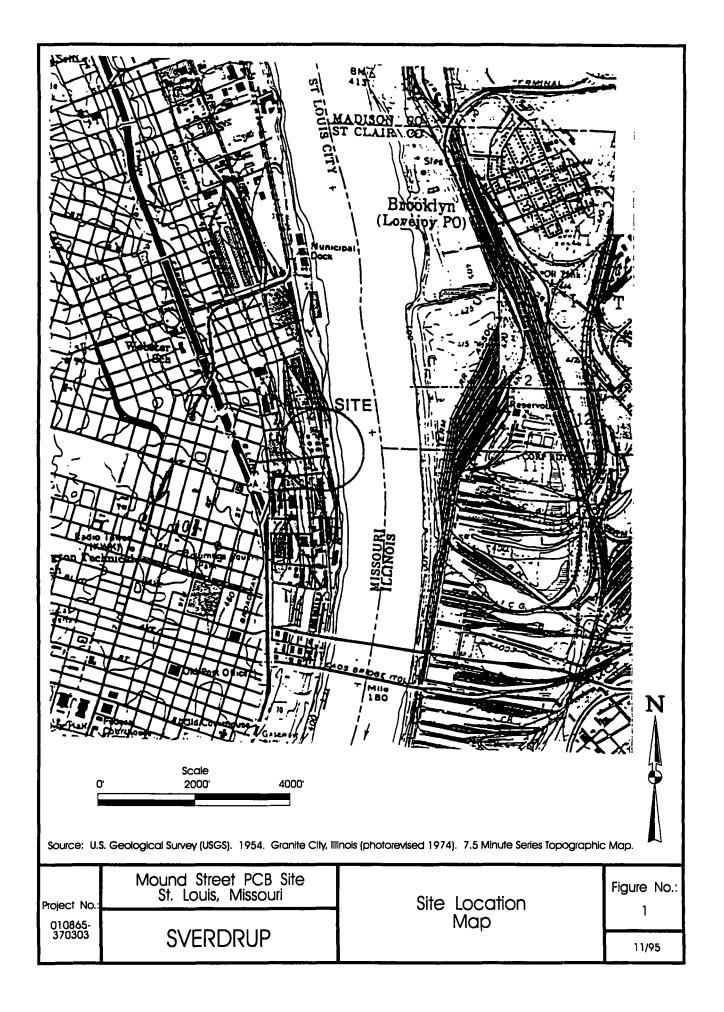
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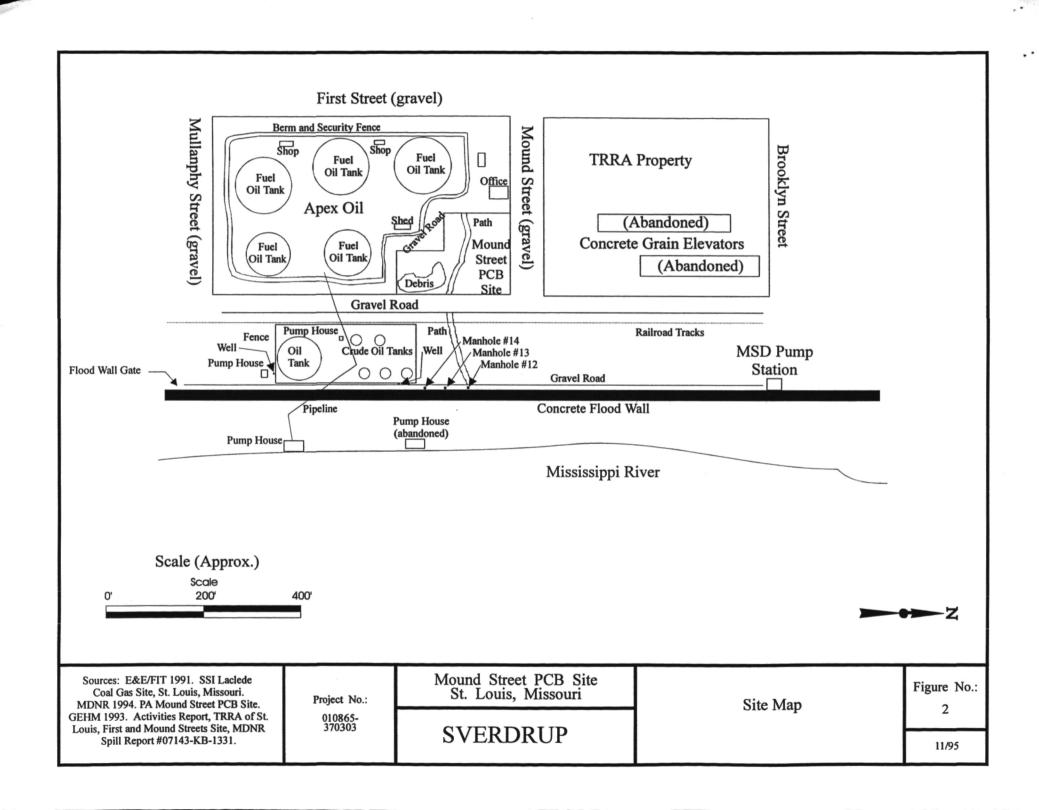
Michael W. McCurdy, CHMM

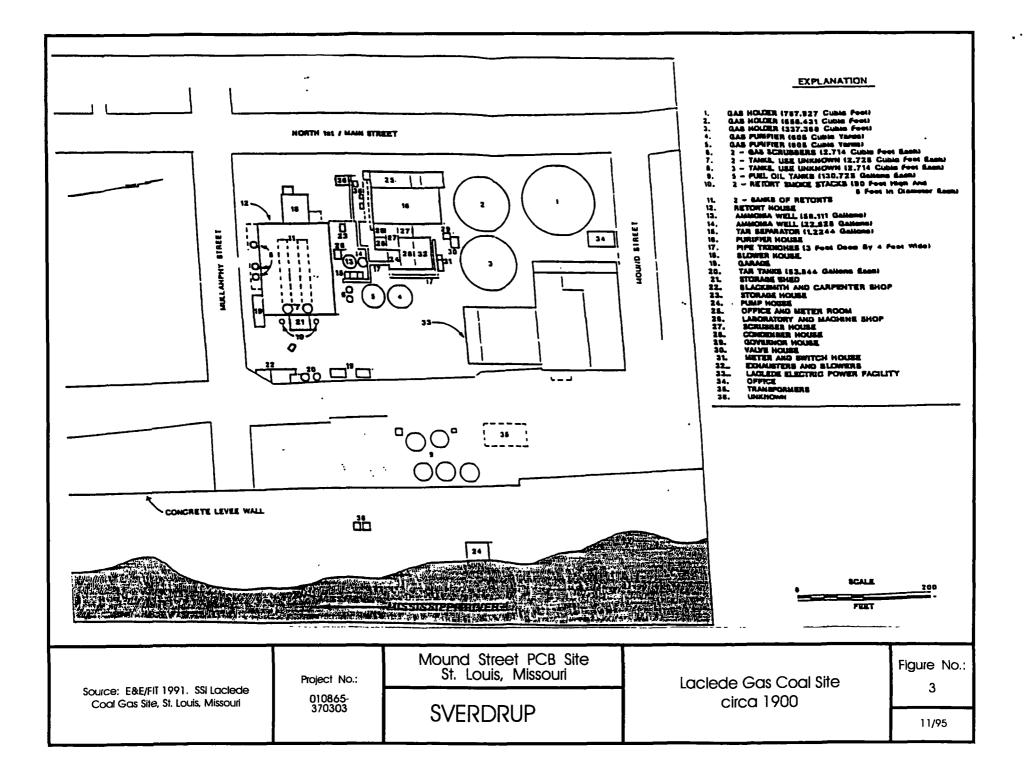
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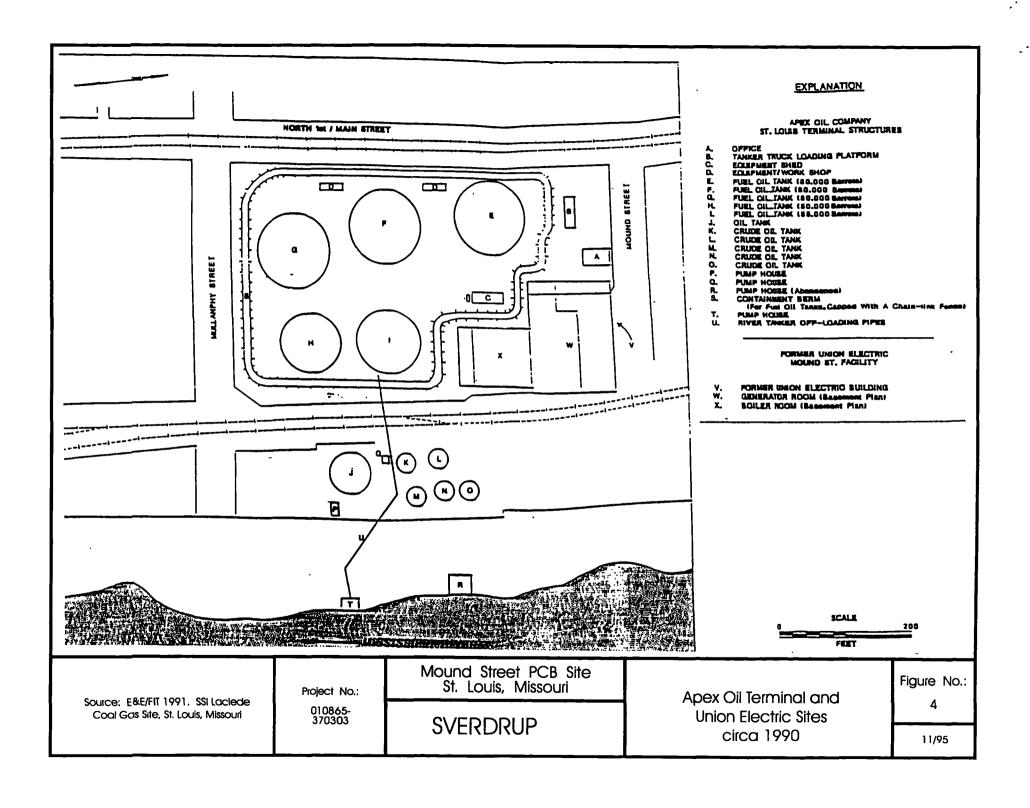
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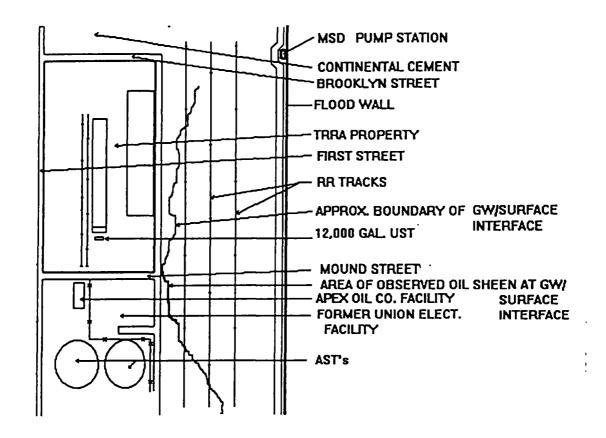
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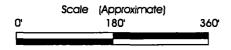








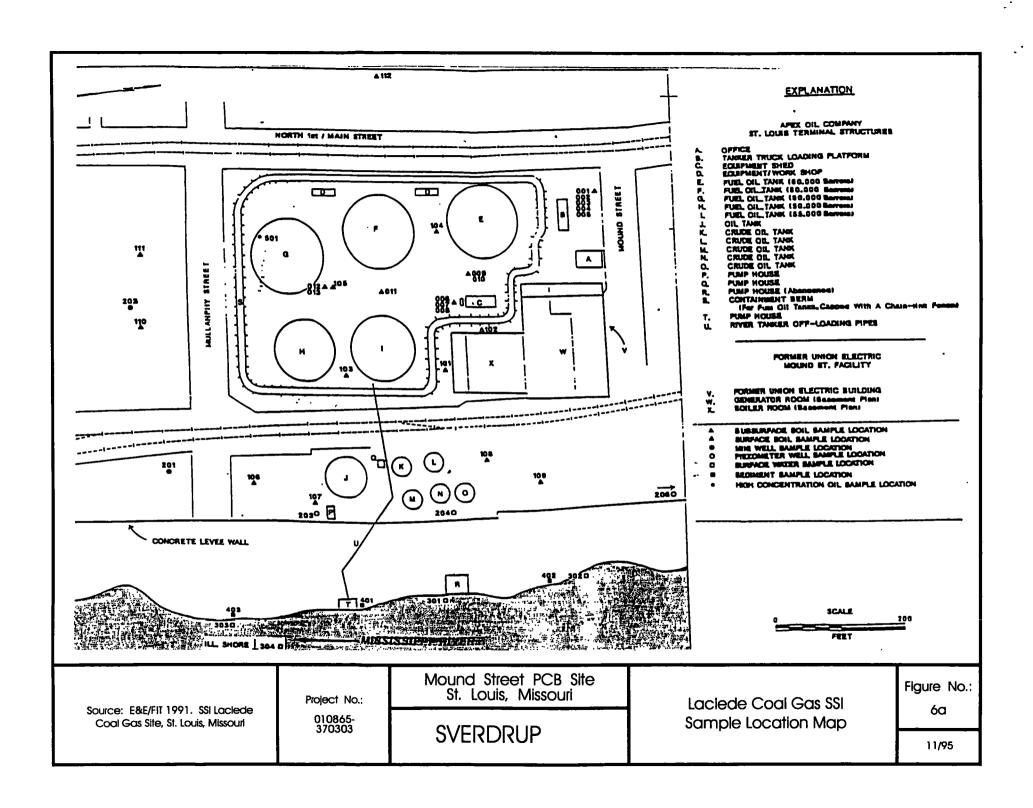


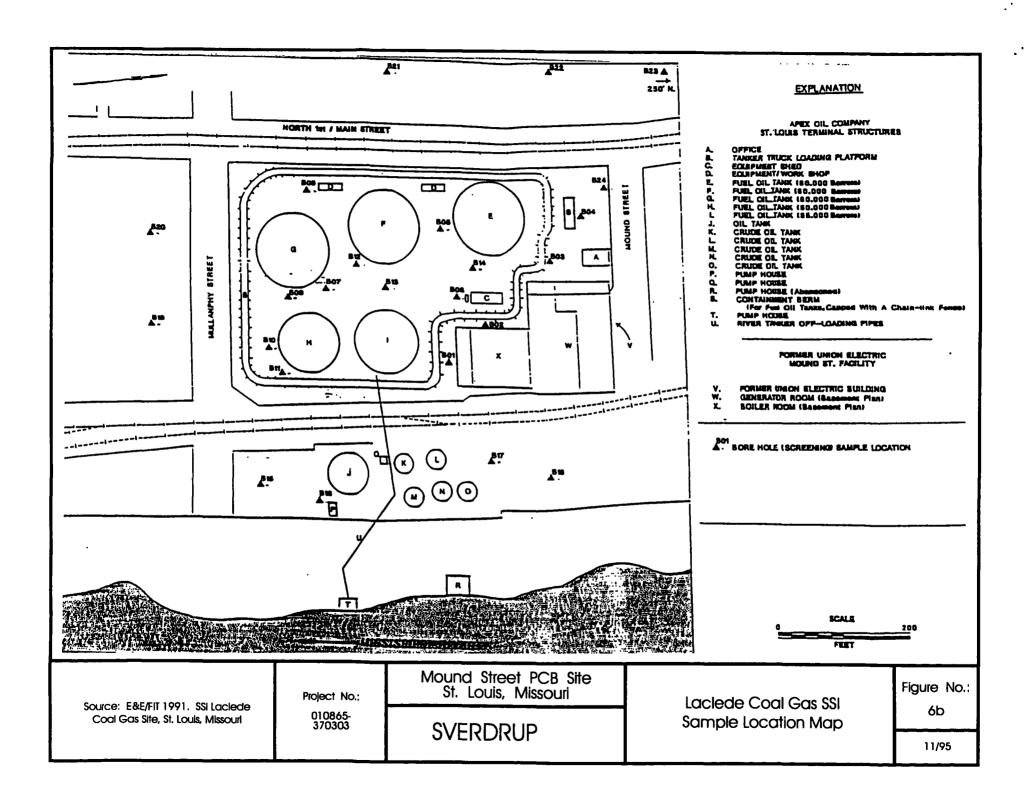


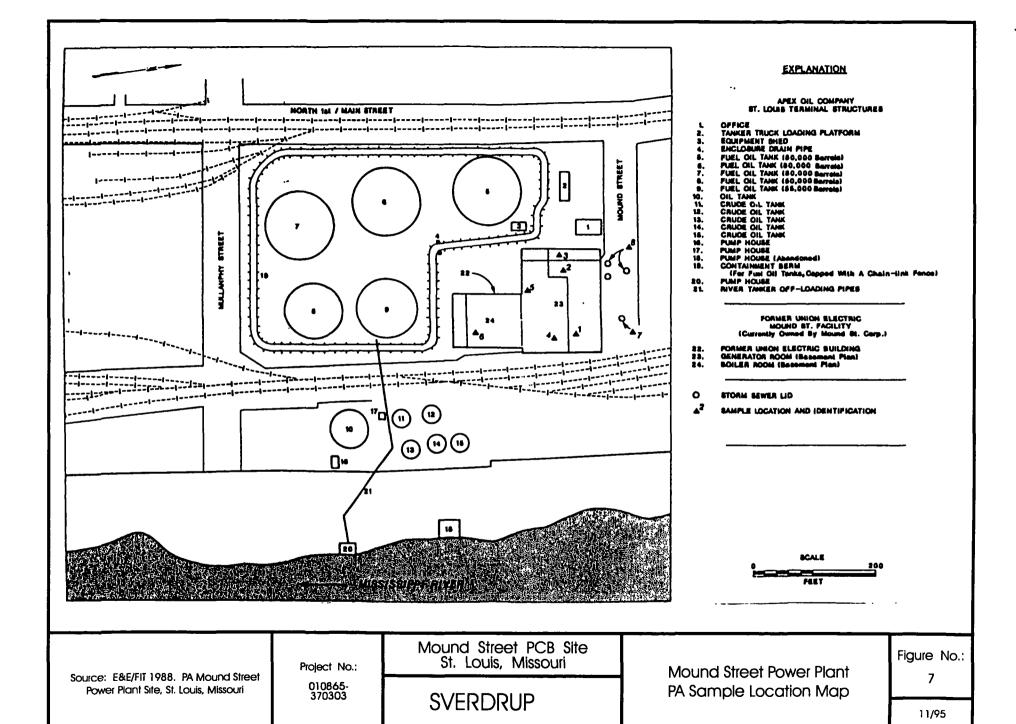
Source: GEHM 1993. Activities Report, TRRA of St. Louis, First and Mound Streets Site, MDNR Spill Report #07143-KB-1331

Project No.: 010865- 370303	Mound Street PCB Site St. Louis, Missouri	TRRA UST	Figure No.:
	SVERDRUP	Location Map	11/95









## Table 1. Screening Site Inspection Sample Analysis Results Laclede Coal Gas Site

Field Analytic	cal Support Program	Mobile Laboratory	Screening Results

Tield Thialytical Support								
Sample No.	Benzene (ug/kg)	Toluene (ug/kg)	Xylene (ug/kg)	Fluor anthene (ug/kg)	Pyrene (ug/kg)	Benzo(k) fluor anthene (ug/kg)	Benzo(a) pyrene (ug/kg)	Comments
B01	1200	380	1700	16000	3700	NT <sup>A</sup>	NT	0-5 ft sample depth, same location as surface soil sample 101
B02	6300	43000	240000	8000	<500	<500	< 500	0-5 ft sample depth, same location as surface soil sample 102
B03	1040	22000	22000	< 500	<500	<500	< 500	0-5 ft sample depth
B17	540	<250	21000	< 500	<500	<500	< 500	0-5 ft sample depth, same location as surface soil sample 108
B18	<250	<250	<250	<500	<500	<500	< 500	0-5 ft sample depth, same location as surface soil sample 109
B23	<250	<250	<250	<500	<500	<500	< 500	0-5 ft sample depth, background soil sample
401	<250	<250	<250	NT	NT	NT	NT	Sediment sample
402	<250	<250	1600	< 500	<500	<500	< 500	Sediment sample
403	<250	<250	420	2600	5400	4200	3800	Sediment sample
301	<25	<25	<25	NT	NT	NT	NT	Surface water sample
302	<25	<25	<25	NT	NT	NT	NT	Surface water sample
303	<25	<25	<25	NT	NT	NT	NT	Surface water sample

Surface Soil Samples										
Sample No.	Pyrene (mg/kg)	Benzo(k) fluor anthene (mg/kg)	Benzo(a) pyrene (mg/kg)	Benzo(b) fluor anthene (mg/kg)	Benzo(a) anthracene (mg/kg)	Chrysene (mg/kg)	Total PAHs (mg/kg)	Cyanide (mg/kg)	Comments	
101	ND <sup>B</sup>	ND	ND	ND	ND	ND	ND	33	0-2 ft sample depth	
102	21	ND	ND	ND	ND	ND	21	ND	0-2 ft sample depth	
107	ND	ND	ND	ND	ND	ND	73 <sup>E</sup>	14	0-2 ft sample depth	
108	ND	ND	ND	ND	ND	ND	9.8	98	0-2 ft sample depth	
109	6.7	3.4	4.2	4.9	4.5	4.3	40	35	0-2 ft sample depth	
112	1.4	0.68	0.7	0.61	0.79	0.85	6.8	<6.7	0-2 ft sample depth, background soil sample	
Sediment Samples										
Sample No.	Pyrene (u/kg)	Benzo(k) fluor anthene (u/kg)	Benzo(a) pyrene (u/kg)	Benzo(a) anthracene (ug/kg)	Cyanide (ug/kg)	Total Hydro carbons (ug/kg)	Total Arsenic (mg/kg)	Total Barium (mg/kg)	Total Chromium (mg/kg)	Total Lead (mg/kg)
401	ND/960 <sup>c</sup>	ND/ND <sup>C</sup>	ND/430 <sup>c</sup>	ND/460 <sup>c</sup>	ND/ND <sup>c</sup>	3100/ <3100 <sup>c</sup>	3.7/4.0 <sup>c</sup>	140/140 <sup>c</sup>	8.7/9.0 <sup>c</sup>	30J/13J <sup>D</sup>
402	8000	2900	2600	3500	1600	8200	8.4	160	16	36J <sup>D</sup>
403	6400J <sup>D</sup>	3100	5600	4200	ND	4900	7.1	160	12	31J <sup>D</sup>

 $\overline{A}$   $\overline{NT} = Not Tested.$ 

B ND = Non detected.

C Sample results/duplicate results.

D J = Results reported but are invalid by approved QC procedures.

E 60 mg/kg naphthalene detected.

Source: E&E/FIT 1991.

## RESPONSE CHECKLIST

Site Name: Mound Street PCB Site	Phone: none onsite	Status:   Active	■ Inactive				
Address: 100 Mound Street, St. Louis, Missouri							
Property Owner: McKinley Iron, Inc. (Contact: )	Herman Gellman)	Phone	: 314-231-6077				
Owner Address: 3620 North Hall Street, St. Lo	uis, Missouri 63147						
Operator Name: McKinley Iron, Inc.		Phone	: 314-231-6077				
Operator Address: 3620 North Hall Street, St. 1	Louis, Missouri 63147						
Site Latitude & Longitude: 38° 38' 34" North La	t., 90° 10' 57" West Long.	Site Setting:   Urban	□ Rural				
Township Range & Section: T 45 N, R 7 E	Site Access R	estricted: □ Yes ■ No					
CERCLIS ID No.: MO0000093682							
1. Is the site in close proximity to any of the follo	owing?						
□ Residential Area □ Major Thoroughfares □ School/Daycare Facility □ Drinking Water Supply Wells □ Surface Water Bodies □ Surface Water Drinking Supplies □ Endangered Species □ Sensitive Environments (e.g., wetlands) □ Gas Station □ State/National Parks/Forests/Monuments, etc. □ Manufacturing Plant □ Above or Below-Ground Tanks □ Grain Elevator □ Dump □ Other □ Landfill  Comments: (If possible, include specific names and indicate proximity to site.) No residential areas are located within a quarter mile of the site. The Mississippi River is near the site, approximately 300 feet to the east. A concrete flood wall separates the site from the river. The site has industrial property located on the remaining three sides, including abandoned grain elevators to the north. The subject site and property to the west and southwest (Apex Oil) were formerly part of the Laclede							
Coal Gas Site. Union Electric operated a power plant at the facility until 1973. Site buildings were demolished in 1991.  2. Potential types of contamination identified during site reconnaissance:							
☐ Surface Soil (estimate volume) ☐ Subsurface Soil (estimate volume) ☐ Groundwater  Comments: Previous environmental investigations h	☐ Air ☐ Surface Water ■ Unknown  ave included Preliminary Assess		•				
Elevated levels of volatile organic compounds, polynuclear aromatic hydrocarbons, and cyanide have been identified on the Laclede Coal Gas Site. Separate sampling events conducted on the site for PCBs showed no contamination.							
3. Were any areas of obvious contamination observed	erved during the site reconnaiss	sance?	Yes ■ No				
4. Do you suspect buried wastes?		-	Yes □ No				
Comments: Former coal gas site.							
5. Are any wastes potentially in contact with gro	undwater?		Yes 🗆 No				
6. What is the depth to groundwater? Reportedly 20' below ground surface.							

	Response Checklist (Continued)						
7.	Current onsite operations: (include specific name and worker population) Site is currently inactive and vacant. Site buildings were demolished in 1991. The adjacent Apex Oil facility is active.						
8.	8. Past onsite operations: (if possible, include specific name and worker population)  The site and Apex Oil facility were part of the Laclede Coal Gas Site from the 1880s to 1945. Union Electric operated a power facility at the site from 1945 to 1973. The site was transferred to Tenlis Company in 1973, who dismantled the power plant equipment. An electric motor stripping operation was conducted at the site between 1985 and 1991. An oil fire occured in the basement of the site building in 1989, and the building was demolished in in 1991. McKinley Iron became the site owner in 1993. The Apex Oil purchased its current facility property in 1969 from Union Electric.						
9.	Are there any drinking water supply wells onsite? ☐ Yes ■ No Are these wells contaminated? ☐ Yes ■ No ☐ Unknown						
10.	Potential onsite sources identified during site reconnaissance:						
	Sources Estimated Volume/Area Suspected Waste						
	<ul> <li>□ Drums</li> <li>□ Tanks</li> <li>□ Surface Impoundments</li> <li>□ Landfill</li> <li>□ Pile</li> <li>■ Contaminated Soil Unknown</li> <li>□ Spill</li> <li>□ Burned Waste</li> <li>□ Waste Stream</li> <li>□ Other</li> </ul>						
11.	Is a release of contaminants from onsite sources suspected? ■ Yes □ No  Media suspected to be contaminated:						
	Media Suspected Contaminant						
	■ Soil ■ Groundwater ■ Surface Water □ Air						
12. Any analytical data available? □ Yes ■ No							
├─	tach all data to this questionnaire.						
HEALTH THREATS							
13. What types of exposure are potentially occurring? ■ Inhalation ■ Ingestion ■ Skin Contact							
14. Are there any reports of the following from potential receptors?     Illness   Injury   Skin Rashes   Death							
Ex	Explain: No reports of any exposure.						

Response Checklist (Continued)
15. Are people living or working in areas of suspected contamination? □ Yes ■ No
Comments:
16. What potential exposure pathways are associated with the site?
■ Drinking Water □ Contaminated Agricultural Crops ■ Contaminated Soils ■ Surface Water ■ Skin Contact
Comments: Surface water supply intake located approximately one quarter mile east of site on the Illinois side of the river. Elevated levels of volatile organic compounds, polynuclear aromatic hydrocarbons, and cyanide have been detected in the soil. PCB levels have not been determined in the soil.
ENVIRONMENTAL THREATS
17. Are there any reports or injuries to natural resources flora or fauna on/in the vicinity of the site? □ Yes ■ No
18. Are there any preferential offsite flow pathways? ■ Yes □ No
19. Is the site located within a floodplain? ☐ Yes ■ No ☐ Unknown 10 yr. 100 yr. 500 yr.
20. Does any offsite drainage pathway flow into a surface water body? ■ Yes □ No
21. Is the previously identified surface water body used for recreational uses? ■ Fishing ■ Recreational □ Unknown
22. Were any of the following seen on or in the vicinity of the site during the reconnaissance?
<ul> <li>□ Endangered/Threatened Species</li> <li>□ Stressed Vegetation</li> <li>□ Discolored Surface Water Bodies</li> <li>□ Discolored Soil</li> <li>□ Wetlands</li> </ul>
Comments:
23. Were wildlife absent from the site or surrounding area? □ Yes ■ No
24. Is there additional information available which documents a threat to the environment? ☐ Yes ■ No
If so, explain.
25. What are the potential short- and long-term effects?
Benzene, toluene, xylene, cyanide and polynuclear aromatic hydrocarbons have been identified in the soil and groundwater near the site from coal gas operations conducted on the site. PCB levels have not been determined in the soil; however, sampling of oil in the power plant basement revealed no PCBs in the oil. Targets for these pathways are minimal.

## REMOVAL SITE EVALUATION SECTION

<u> </u>	Total Control of the						
1.	Is there evidence of a release as defined by Section 300.5 of the NCP?	□Yes	■No				
2.	Is the source of the release either a vessel or a facility as defined by Section 300.5 of the NCP?  □ Vessel ■ Facility		Neither				
3.	Does the release involve either a hazardous substance, a pollutant, or contaminant that may present ar substantial danger to public health or welfare?	immin					
4.	4. Is the type of release subject to the regulations on response exclusions specified in Section 300.400 (b) of the NCP (i.e., naturally-occurring substance, part of a structural building products, or due to deterioration of a drinking water distribution system?						
Ex	plain:	Yes ■	No				
5.	Is there a responsible party or other person providing appropriate response such that response and/or monitoring by the government is not necessary?	on-scen	e				
Ex	plain:	□ Yes	■ No				
	The site is currently inactive and vacant. No activities are being performed on the site; however, the adjace as a petroleum storage facility.	nt site is	active				
6.	Are any of the following conditions or factors present, or are likely to be present, at the site which wor a removal action under Section 300.415 of the NCP may be necessary?	uld indi	cate that				
	☐ Actual or potential exposure to nearby human populations, animals, or food chain from hazardous substate pollutants or contaminants;	nces or					
	☐ Actual or potential contamination of drinking water supplies or sensitive ecosystems;						
	☐ Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, tanks, or other bulk storage contaminants in drums, barrels, and tanks are tanks and tanks are tanks.	iners, th	at may				
} }	☐ High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, migrate;	that may	,				
	☐ Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be re-	eleased;					
	☐ Threat of fire or explosion;						
	☐ The availability or other appropriate Federal or State response mechanisms to respond to the release;						
	☐ Other situations or factors that may pose threats to public health or welfare or the environment.						

## Removal Site Evaluation Section (Continued) Attention Site Assessment Personnel: The following questions should only be completed by EPA personnel. 7. Which of the following removal-type actions are considered appropriate to address the threats presently posed by the site? ☐ Fences, warning signs, or other security or site control precautions. ☐ Drainage controls, such as run-on or run-off diversion structures. ☐ Stabilization of berms, dikes, or impoundments or drainage or closing of lagoons. ☐ Capping of contaminated soils or sludge. ☐ Using chemicals or other materials to retard the spread or release or to mitigate its effects. ☐ Excavation, consolidation, or removal of contaminated soils from drainage or other areas. ☐ Removal of drums, barrels, tanks, and other bulk containers that contain or may contain hazardous substances or pollutants or contaminants. ☐ Containment, treatment, disposal, or incineration of hazardous materials. ☐ Provision of alternative water supply. 8. In light of the magnitude of the threat or potential threat to health, welfare, or the environment, the removal action should be undertaken as a: ☐ Emergency Removal Action ☐ Time-Critical Removal Action □ Non-Time-Critical Removal Action